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EXAMINER

KUBELIK, ANNE R

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte GHISLAINE TISSOT, NATHALIE DUFOURMANTEL,
FREDERIC GARCON, JEAN-MARC FERULLO,
and BERNARD PELISSIER

Appeal 2015-006391
Application 10/538,130
Technology Center 1600

Before TAWEN CHANG, TIMOTHY G. MAJORS,
and RACHEL H. TOWNSEND, *Administrative Patent Judges*.

MAJORS, *Administrative Patent Judge*.

DECISION ON REQUEST FOR REHEARING

Appellants request rehearing of the decision entered January 26, 2017 (“Decision”). Appellants argue the Board misapprehended Appellants’ use of post-filing publications, as well as Appellants’ arguments regarding unclaimed insertion sites. (Req. Reh’g 2–4.) Appellants also argue the Board overlooked and misapprehended the inventors’ work concerning the claimed invention. (*Id.* at 5.) Appellants have not persuasively shown that the Board overlooked or misapprehended the matters alleged.

The Request for Rehearing is, accordingly, DENIED.

Appellants contend “the Board misapprehended (1) Appellant’s ability to rely on post-filing evidence; and (2) the relevance of this evidence in supporting Appellant’s arguments.” (*Id.* at 4.) More specifically, according to the Appellants, “the Board’s conclusion that the post-filing publications cannot ‘demonstrate what the person of ordinary skill in the art would have known or reasonably expected at the time of the invention’ is legally erroneous.” (*Id.* at 2.)¹ Appellants also assert, the “post-filing evidence establishes . . . that Maliga’s ‘preferred’ insertion site is unsuitable in soybeans, plastid genomes are not ‘highly’ conserved among all plants, and prior to the application, plastid transformation in major crops, such as soybean, did not produce fertile plants.” (*Id.*)

Appellants’ contentions are unpersuasive. Contrary to Appellants’ assertion, the Board did not conclude post-filing publications “cannot” evidence an earlier state of the art. We noted that Appellants’ brief on appeal did not persuasively indicate how the post-filing references reflected “the perspective and expectation of the skilled artisan at the time of the invention,” e.g., demonstrating failed efforts or evidence of inadequate knowledge at the time of filing as related to the teachings of Maliga and von Allmen, but instead focused on the inventors’ own work in overcoming problems encountered. (Decision 8–10 (citing Appeal Br. 7–10).) We explained that Appellants’ evidence did not describe problems or challenges

¹ In support, Appellants cite *Plant Genetic Sys. NV v. DeKalb Genetics Corp.*, 315 F.3d 1335, 1344 (Fed. Cir. 2003) and *In re Hogan*, 559 F.2d 595, 605 (CCPA 1977). (Req. Reh’g 2.) Although both these cases are related to the use of post-filing evidence for an enablement analysis under § 112, first paragraph, we recognize that post-filing publications may sometimes be relied upon in other contexts. *See Hogan*, 559 F.2d 605, n. 17.

known to the ordinarily skilled person concerning the claimed trnV-rps12/7 insertion site — a site exemplified and described in Maliga as “particularly useful” — before Appellants’ invention. (*Id.* and 6–7, 10.) In contrast, Appellants’ brief focused on the inventors’ discovery as evidenced in post-filing publications that certain *unclaimed* insertion sites did not work well in soybean (Br. 7–9). As explicated in our Decision, Appellants failed to demonstrate that such information was known to skilled persons prior to the invention or even, if known, how that would have a bearing on the explicit teaching of Maliga concerning a different insertion, which is the one claimed. (Decision 9–10.) Appellants provided argument but insufficient persuasive evidence showing that the post-filing publications reflected the state of the art at the time of invention and that a skilled person would have had no reasonable expectation of success despite Maliga’s teaching that the claimed insertion site could be broadly extended to other crop species. (Decision 4, 6–7.)

In the Request for Rehearing, Appellants argue the Dufourmantel publication “contradicts Maliga’s teaching that plastid genomes are highly conserved.” (Req. Reh’g 3 (citing Dufourmantel at 480.)) But Appellants did not show in the Appeal Brief, or now, that the alleged lack of conservation (e.g., about the unclaimed rbcL-accD site in soybean) was known to other skilled persons before Dufourmantel published. In the Appeal Brief, Appellants describe this as a problem “the inventors found.” (Appeal Br. 8.) The authors of Dufourmantel and the inventors of the present application overlap (Req. Reh’g 3 n.2), and Appellants provided insufficient persuasive evidence of broader knowledge of the alleged lack of conservation before Dufourmantel published.

Appellants also argue, regarding Dufourmantel and its mention of a study by Zhang², that “before the application was filed . . . transformation of soybean was ‘attempted,’ ‘but no whole and fertile plants were regenerated.’” (Req. Reh’g 3 (citing Dufourmantel at 480).) This is newly raised argument and evidence. So the Board did not misapprehend it. 37 C.F.R. § 41.52(a)(1). Indeed, the only specific citation to Dufourmantel in Appellants’ brief was to page 482 — again regarding the inventors’ apparent discovery that certain insertion sites did not work well in soybean. (Br. 7.) Appellants did not cite Zhang at all. Appellants have not explained why this argument falls within an exception in 37 C.F.R. § 41.52(a)(2) through (a)(4).

Appellants also point to Daniell, published in 2005, and contend it credits Dufourmantel, *i.e.*, the inventors, with the first successful transformation in soybean. (Req. Reh’g 3.) Daniell discloses “[t]he first successful . . . generation of fertile chloroplast transgenic plants of soybean was reported by Dufourmantel *et al.*” (Daniell 242, 2nd col.)³ This too is new argument, as are Appellants’ contentions regarding alleged pre-filing “failures” and “limitations” in Daniell. (*See* Req. Reh’g 3; *see also* Br. 7 (“[t]he site most often reported in the literature was not the trnV-rps12/7 site, but the trnI-trnA and the rbc-accD sites”) citing Daniell Tables 1 and 2.) In any event, “[t]hat the inventors were ultimately successful is irrelevant to whether one of ordinary skill in the art, at the time the invention was made, would have reasonably expected success.” *Life Techs., Inc. v. Clontech Labs., Inc.*, 224 F.3d 1320, 1326 (Fed. Cir. 2000).

² (*See* Dufourmantel 480 (citing “Zhang et al. (2001a)”)).

³ Inventor Nathalie Dufourmantel is a co-author of the Daniell publication.

Appellants further contend the Board misapprehended the arguments concerning other vectors and insertion sites. (Req. Reh’g 4.) Appellants contend they did not seek to use the cited publications to show a teaching away, but instead to show that the skilled person would not have had a reasonable expectation of success. We are not persuaded the Board misapprehended Appellants’ argument. Quite the opposite, we specifically recognized “Appellants [] argue[d] there was *no reasonable expectation of success* in combining Maliga and von Allmen . . . because *other vectors* and insertion sites were known” and then we proceeded to discuss Appellants’ evidence purporting to show that some unclaimed vectors did not work well in soybean. (Decision 8–9 (emphases added).) We simply disagreed that Appellants argument and evidence negated the reasonable expectation of success about the claimed insertion site that was provided in the prior art.

Finally, Appellants argue the Board overlooked and misapprehended the inventors’ work. (Req. Reh’g 5.) We disagree. We explained (Decision 8) that “[t]he path that leads an inventor to the invention is expressly made irrelevant to patentability by statute.” *Life Tech.*, 224 F. 3d at 1325. Nevertheless, we also adopted the Examiner determination that, *inter alia*,

Appellant has not explained why discovering the sequence was incorrect was critical to successful soybean transformation. One of ordinary skill in the art does not synthesi[ze] each base of a vector chemically, de novo. One of ordinary skill in the art uses portions of other vectors and/or PCRs them up from genomic DNA. In the instant situation, one of ordinary skill in the art would make primers based on von Allmen’s sequence to make one flanking region comprises the 16SrRNA and comprising rps12/7[] another. Because the flanking regions were amplified from genomic plastid DNA, which comprises SEQ ID NO:1 and 2 in the [T]rnV-rps 12/7 region, they would inherently correspond to sequences comprising SEQ ID NO: 1 and 2. . . .

Appellant has not explained why sequencing the region was [] more than routine experimentation.

(Ans. 7–8; Final Act. 5–6; *see also* Decision 3, 7–8.) Appellants submitted no reply brief, and otherwise failed to persuasively dispute the Examiner on these points. (Br. 10.) Here again, we considered Appellants’ arguments, but on the present record we were persuaded that the preponderance of the evidence supported the Examiner’s conclusion of obviousness.

In sum, Appellants have not sustained their burden of showing that we misapprehended or overlooked relevant points of fact or law in arriving at our Decision. Thus, although we have considered the Request for Rehearing and reconsidered the Decision, we deny Appellants’ request for relief from that Decision.

TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

REHEARING DENIED